ANR-100 DIVISION

PROGRAM OFFICE PERSONNEL

Division Manager:	Carmine Primeggia	ANR-100	(202) 606-4532
Technical Assistant:	William Collins	ANR-102	(202) 606-4541
Division Analyst:	Milton Ryan	ANR-103	(202) 606-4536
Secretary:	George E. Brown	ANR-100	(202) 606-4534
Program Office Fax:	FTS 8-266-4723 or (202) 606-4723		

From the Desk of Carmine Primeggia:

It's great to be back into the technical world. For the last 6 months, I have been working with Senator Barbara A. Mikulski, the first Democratic woman ever elected to the United States Senate. Senator Mikulski enjoys being a Senator and enjoys doing the "heavy lifting" for the State of Maryland. The Senator believes that her job is to speak out and fight for changes even when it's politically risky. I was given full authority to represent the Senator in several Appropriations Subcommittees. I wrote a number of Senate floor statements for the Senator that appeared in the Congressional Record; numerous position papers and talking points and policy papers for speeches; and, in addition, made appearances back in Maryland and Washington, D.C. As a recipient of the Legis Fellows Program, I have acquired an in-depth working knowledge of congressional operations and a deeper insight of the impact on the laws of the Government as related to the public. This experience has equipped me to better meet the needs of the Surveillance Engineering Division and the FAA.

Carmine Primeggia
Division Manager, ANR-100

TERMINAL RADAR PROGRAM

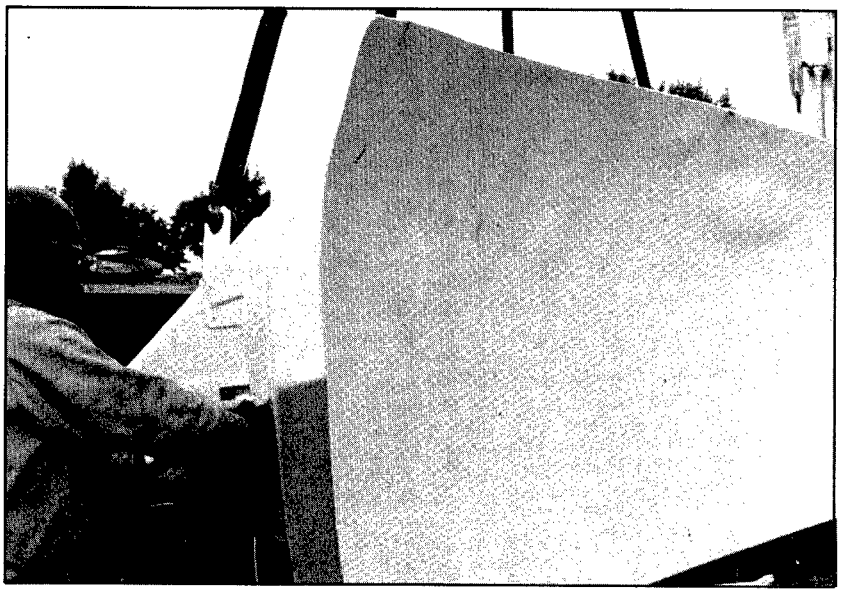
PROGRAM OFFICE PERSONNEL

Program Manager:	Gerald Taylor	ANR-200	(202) 606-4622
Business Manager:	John Loynes	ANR-202	(202) 606-4621
APM for Engineering:	John Horrocks	ANR-120	(202) 606-4613
Technical Officers:	Phil Leman (ASDE-3)	ANR-120	(202) 606-4623
	Tony Garka (ASR-9)	ANR-120	(202) 606-4610
Program Office Fax:	FTS 8-266-4625 or (202) 606-4625		

ASDE-3 PROGRAM

CURRENT DELIVERY STATUS

The Field Test and Evaluation for the ASDE-3 System No. 1, which was installed at Pittsburgh in December 1989, was successfully concluded on December 31, 1991. Assuming that the Operational Test and Evaluation (OT&E) and shakedown are successful, ORD should be completed on March 30, 1992. Additional ASDE-3s have been delivered and are operational at the FAA Academy at Oklahoma City, the FAA Technical Center at Atlantic City, and San Francisco. The latter will be utilized by ARD to conduct AMASS validation trials. Also, an ASDE-3 rotodome has been installed on top of the new ATC tower currently under construction at New York's JFK.



Pittsburgh ASDE-3 Antenna With Reflector Surface Bubbles Headed for Early Retirement

TERMINAL RADAR PROGRAM (Cont'd)

CURRENT DELIVERY STATUS (Cont'd)

The Northwest Region has requested expedited delivery to Portland, and the Program Office is attempting to arrange this with the contractor.

The Program Office has a high level of confidence in the ASDE-3 delivery schedule now that the antenna reflector debonding problem has been resolved. This debonding problem (see photograph) was caused by epoxy lay-up irregularities during production. All 27 faulty reflectors have been scrapped, and the construction of replacements is well underway.

QUALITY ASSURANCE

The Reliability Demonstration (RELDEMO) and Corrective Maintenance Demonstrations were successfully completed in December, 1991.

DELIVERY SCHEDULE

The revised delivery schedule accounts for production delays caused by the antenna reflector debonding problem. Some additional changes can be expected to mesh in with individual site readiness dates.

For a variety of reasons, some sites will not be ready to accept the ASDE-3 radars on the scheduled delivery date. The radars for these sites will, therefore, be available for reallocation to other airfields and replaced with later deliveries. Regional APMs are requested to endeavor to complete site preparation work at airfields in their region at the earliest time and to notify the PM of those sites that will be ready prior to the scheduled delivery date.

TERMINAL RADAR PROGRAM (Cont'd)

ASDE-3 DELIVERY SCHEDULE (as of 1/30/92)

Site Location	Equipment Del. Date	Turnkey Accpt. Date
Pittsburgh, Pa[1]	12/31/91	12/31/91
FAA Academy[2]	05/31/91	07/15/91
FAA Technical Center[3]	06/30/91	08/15/91
Dallas/Ft. Worth	02/28/92	06/30/92
Philadelphia	02/28/92	06/30/92
Los Angeles	03/31/92	07/31/92
Detroit	03/31/91	07/31/92
Atlanta	04/30/92	08/31/92
San Francisco	11/01/91	12/15/91
Boston	05/31/92	09/30/92
Newark	05/31/92	09/30/92
Cleveland	06/30/92	10/31/92
New York - Kennedy	06/30/92	10/31/92
Seattle	07/31/92	11/30/92
Portland	07/31/92	11/30/92
Dulles	08/31/92	12/31/92
Andrews AFB	08/31/92	12/31/92
Miami	09/30/92	01/31/93
New York - La Guardia	09/30/92	01/31/93
St. Louis	10/31/92	02/28/93
Houston[5]	10/31/92	02/28/93
Washington National	11/30/92	03/31/93
Memphis	11/30/92	03/31/93
Denver (DVX)[4,5]	03/31/93	07/31/93
Houston[5]	04/30/93	08/31/93
Minneapolis	12/31/92	04/30/93
Los Angeles[5]	04/30/93	08/31/93
Chicago	12/31/92	04/30/93
Tampa	01/31/93	05/31/93
Baltimore	01/31/93	05/31/93
New Orleans	02/28/93	06/30/93
Kansas City	02/28/93	06/30/93
Anchorage	03/31/93	07/31/93

[1]Equipment Was Accepted Upon Completion of FT&E
[2]FAA Training/Field Support/Depot Support Facility
[3]FAA R&D System for Run Incursion
[4]Second System to be Procured in FY 1992
[5]Dual Sensor Facilities

TERMINAL RADAR PROGRAM (Cont'd)

SITE SURVEYS

Site survey/resurvey was recently completed at the following ASDE-3 sites: Dallas/Ft. Worth, Los Angeles, San Francisco, and Boston.

The following airfields require a site survey/resurvey by the Norden subcontractor, Technology Applications and Service Company (TAS).

La Guardia:	Site to be selected by Region
Houston:	Site/s to be selected by Region
Memphis:	Site to be selected by Region
Minneapolis:	Site to be selected by Region
Chicago:	Delayed pending completion of new ATC tower (12/93)
Tampa:	Site to be selected by Region
New Orleans:	Delayed pending completion of new ATC tower (8/93)
Kansas City:	Site to be selected by Region

Dates for the surveys will be advised when known.

ASR-9 PROGRAM

Program Manager:	Gerry Taylor	ANR-200	(202) 606-4685
APM for Engineering:	John Horrocks	ANR-120	(202) 606-4613
Technical Officer:	Tony Garka	ANR-120	(202) 606-4610
System Engineer:	Bill Goodchild	ANR-120	(202) 606-4607
Installation:	Steve Kent	ANR-120	(202) 606-4635
Installation:	Tom Kays	ANR-120	(202) 606-4664

ASR-9 FLIGHT ASSIST

In the Central Region, an all too common winter flying episode took place in November. The pilot of a single engine Cessna aircraft encountered severe icing and was unable to maintain altitude. Fortunately, FAA controllers were able to locate the aircraft and provide radar guidance to a nearby airport, where he and his two passengers landed safely.

This successful flight assist was possible because of the improved performance of the ASR-9 radar system in an area exceeding the usable limits of other FAA ASR radars. More than 40 years of experience in a wide range of proven production state-of-the-art radar technology went into the ASR-9. This highly accurate terminal radar system employs a Moving Target Detector (MTD), developed by M.I.T./Lincoln Laboratories, that provides superior detection of low-flying aircraft over heavy ground clutter and in severe weather.

TERMINAL RADAR PROGRAM (Cont'd)

ASR-9 QUALITY ACTION TEAM

The ASR-9 was designed to operate 24 hours a day, 365 days a year, without full-time maintenance personnel. Since fielding the ASR-9 however, several problems have surfaced that are affecting the reliability of the system. In addition, high levels of X-rays were being emitted in the vicinity of the oil tank that contains the high voltage components of the transmitter. Klystron arcing and the resulting transmitter faults were rapidly depleting the spare parts; the technicians are being heavily taxed to maintain the system. These problems have caused delays in the commissioning schedule, preventing the ASR-9 from realizing its intended operational capability.

Our first task was to solve the X-ray problem. This was done last summer by installing temporary shields on the front and back of the oil tank. After completing installation, a Quality Action Team was established to identify the cause of lower than normal reliability of the ASR-9 and to propose solutions to the problems. The QAT is examining all aspects of the ASR-9 reliability problems including supply/support, training, and engineering. Subcommittees have been set up to work each of these areas and are actively pursuing their goals.

TRANSMITTER ARCING

A problem identified in the transmitter design is that the transmitter does not allow the klystron to arc within limits. The klystron amplifier, is a high voltage, high vacuum device that operates with 70,000 volt pulses. A characteristic of such high voltage devices is that they arc due to microscopic particles, or "whiskers", that cannot be removed during manufacture, and outgasing of the metals used in their construction.

Since a single pulse contains little energy, the arc that takes place does not result in damage to the tube, but it does cause the ASR-9 to fault. If instead, the arcing is carried out under controlled conditions, the klystron will "clean up" and continue in operation. The transmitter design of the ASR-9 did not provide for arcing under controlled conditions; consequently, the fault circuits would shut the transmitter off after an arc, and the klystron was often unnecessarily replaced. This problem also caused false reports to be generated in the fault detection circuits, making maintenance trouble-shooting very difficult. Circuits have been developed to allow the transmitter to sustain a number of arcs that will "clean up" the klystron and eliminate the false fault reports that were generated due to the EMI. The techniques and circuits have been implemented by Lincoln Laboratory on an ASR-9 test bed located at the Orlando International Airport and are being transitioned through the prototype phase by the Westinghouse Electric Corporation; ultimately, production equipment will be supplied for use in the field.

TERMINAL RADAR PROGRAM (Cont'd)

TRANSMITTER X-RAYS

The X-ray problem resulted from the transmitter high voltage tank being made from aluminum instead of the usual steel. Due to the high operating voltage of the klystron, generation of X-rays is unavoidable. An additional geometric factor in the design of the ASR-9 transmitter tank contributed to a reduction in the attenuation of X-rays as they traverse the path through the insulating oil. In the past, X-rays have been successfully contained by the use of a steel tank. A prototype steel oil tank has been fabricated by Westinghouse Electric Corporation and tested for its effectiveness in shielding X-rays at the Lincoln Laboratory site. Initial tests using a ionization type gauge detected no measurable X-ray radiation from the tank. The new tank design will ensure that the safety standard of 2 mr/hr is met.

REDESIGNED MPA

The circuits associated with the Modulator Pulse Assembly (MPA) were packaged in such a manner that maintenance was difficult. WEC and Lincoln Labs, working with ASM-400 has reconfigured the MPA to make components readily accessible to facilitate maintenance and improve reliability. A prototype of the new MPA is being tested at the Orlando test bed.

NAILS IMPROVEMENT

During the redesign of the ASR-9 transmitter, we have been looking at our logistical processes. Our purpose is to review our NAILS processes, paying particular attention to procedures that would enhance material support and provide better ways of expediting replenishment parts and measurability reduce repairable (LRU) turn-around-time.

ASR-9 GO BACK TEAMS

Westinghouse has been tasked by the ASR-9 Program Office to update each accepted ASR-9 to the latest configuration baseline. The baseline consists of all approved Electronic Equipment Modifications that have been generated and approved since the first ASR-9 was commissioned in 1989. All ASR-9 sites in the Western Pacific and Central Regions have been brought up to the latest baseline. Work is now ongoing in the Great Lakes and Southwest regions.

ASR-9 NOTES

As of the end of February, 85 ASR-9s have been delivered to the field and 31 sites have been commissioned.

The fourth and final ASR-9 Type Test was successfully completed at Westinghouse on February 3. A Litton klystron was used in the fourth Type Test, and, consequently, some of the future ASR-9 systems to be delivered will include Litton klystrons that are completely interchangeable with the Varian klystrons.

TERMINAL RADAR PROGRAM (Cont'd)

ASR-9 NOTES (Cont'd)

Two additional Westinghouse field engineers have been provided to ASM-400; there are now five Westinghouse field engineers stationed at the FAATC.

X-ray shields have been provided to all delivered sites. Direction has been given to Westinghouse to provide panel interlocks to the back of the transmitter.

Final ASR-9 Technical Instruction Books (TIBs) are being printed and sent to the field by Westinghouse. As the TIBs are printed, they will be delivered to field sites. Delivery of all TIBs is expected to be completed by June.

A fix for noise reduction within the buildings has been procured by the Western Region for both Los Angeles sites and has met all expectations. The modification consists of external baffles that are provided outside of the air intakes and exhaust outlets. These baffles are now a standard catalog item and can be ordered directly from the manufacturer. Contact the Program Office for details.

AMASS PROGRAM

AMASS PERSONNEL

The AMASS Program Office for F&E activity is located at the Universal Building, 1825 Connecticut Ave. N.W. Washington, D.C. 20009.

Program Manager:	Gerry Taylor	ANR-200	(202) 266-4685
APM for Engineering:	John Horrocks	ANR-120	(202) 266-4613
Business Mgr:	John Loynes	ANR-202	(202) 266-4621
Technical Officer:	Fong Lee	ANR-120	(202) 266-4620

The AMASS Program Office for R&D activity is located at 800 Independence Avenue, S.W., Washington, D.C.

APM for Enginering (R&D):	John Heurtley	ARD-100	(202) 267-8747
Technical Officer (R&D):	Randy Wiken	ARD-100	(202) 267-9211

DESCRIPTION

AMASS will provide a new and unique advisory capability to air traffic controllers. For the first time, controllers will automatically receive aural and visual alerts and warnings when a potential runway incursion situation is detected.

AMASS is a hardware and software enhancement to the ASDE-3 radar and will utilize inputs from that radar and ARTS to identify and monitor all runway/taxiway traffic. Using specially developed algorithms and unique, site dependent parameters/maps, AMASS will accurately locate, identify, track, compute velocity and acceleration, and project future position of multiple targets every second.

TERMINAL RADAR PROGRAM (Cont'd)

DESCRIPTION (Cont'd)

Developmental validation trials of a preproduction AMASS will be conducted at San Francisco International Airport during the latter half of 1992. Production AMASS units are currently scheduled to be installed at all ASDE-3 sites during 1994/1995.

SECONDARY RADAR PROGRAM

PROGRAM OFFICE PERSONNEL

Program Manager:	Pike Reynolds	ANR-300	(202) 267-8258
Business Manager:	Irene Langwell	ANR-302	(202) 606-4798
Secretary:	Carolyn Berry	ANR-300	(202) 606-4627
APM for Engineering:	Byron Johnson	ANR-130	(202) 606-4644
Technical Officer:	Larry Taubenkibel	ANR-130	(202) 606-4639
Program Office Fax:	FTS 8-266-4286 or (202) 606-4286		

MODE-S PROGRAM

The Program Office and the contractors have developed a change to the system design to allow sustained system operation in the analog mode, known as the Interim Beacon Initiative (IBI). Members of the "Modification 38 IBI Definitization Team" completed their technical and cost review of the IBI cost proposals for Modification 38 definitization. The team presented the JV a list of cost proposal questions, including hardware/software design and acceptance test issues, software schedule and development issues, implementation issues, site sequence delivery and implementation schedule, and ILS and spare testing issues. The idea behind the IBI is to allow Mode-S hardware to be delivered, installed, and commissioned in the backup mode prior to completion of Operational Test and Evaluation (OT&E) for the full Mode-S software functionality.

On December 12, 1991, a Mode-S Deployment Readiness Review (DRR) meeting was held, and provisions were made for FAALC (AAC-402), AAC-445B, and AAC-485A) to review the Dedicated Repair Services (DRS) Phase II RFP and Statement of Work. APML will coordinate this final review and input any additional FAALC requirements to ANR-130 to facilitate the DRS contract execution process.

SECONDARY RADAR PROGRAM (Cont'd)

The Program Office has been briefing the regions on Mode-S Implementation, providing a Mode-S System Overview that addresses the basics of secondary radar, Mode-S design, and program information. These regional Program Reviews began with the Program Office visiting the Eastern and Southern regions in July and August, and the New England Region in September. On February 4 and 6, 1992, the Northwest Mountain and Western Pacific Regions are scheduled for review. The remaining regions, Southwest, Central and Great Lakes, will be visited by the middle of 1992.

Starting January 1992, the Program Manager for Secondary Radar has assumed responsibility for the ATCRB Relocation Program (CIP #44-45), sometimes referred to as the Beacon Leapfrog Program. It was appropriate to move the responsibility from the Program Manager for Enroute Radar to the Program Manager for Secondary Radar because of the relationship of ATCRB relocation and the field deliveries of Mode-S. The project essentially is a redistribution of beacon assets, resulting in the operation of most modern beacons (within FAA). Without an ATCRB Relocation project, the FAA will continue the use ATCBI-3s (a system introduced in 1961), while ATCBI-5s would be available, but unused.

Leapfrog will consist primarily of technical and engineering services performing "in-place" installation at 52 ATCBI locations.

The Program Office has established the Interim ATCBI Establishment (CIP #34-12). There has been a need to resolve the susceptibility of the older beacon systems to the effects of synchronous garble. The anomaly prevents the older beacon radars from reporting all targets. The Mode-S is designed to resolve this anomaly. This cannot be met at the newly established terminal sites if the older beacon systems are used. Both CIP Implementations, #34-12 and #44-46, are not scheduled until FY 1997, and not fielded until FY 2001, so partial implementation of CIP #34-12 will procure and make available by FY 1996 additional performance beacons compatible with the ASR-9 and ARSR-4. Currently, the Program Office is developing a Mission Need Statement and conducting comparative risk and capability analyses to evaluate the technical feasibility between the alternatives and the current ATCBI-3.

The Matrix Team continues monthly meetings and has improved relations of members and contractors by completing Phase I and Phase II of "Teambuilding". PHASE III, scheduled for March, is the final stage bringing together the Program Office and support contractors. The continuing goal, as seen in the previous phases, is for the Matrix Team to gain clarity and agreement on respective roles and accountabilities in supporting the program mission. One note to add, De Lynn Farris, the Mode-S Contracting Officer, left headquarters to return to the SouthWest Region in December. Her departure is regrettable; she has been a valuable member of the Mode-S team. However, we wish her well in her assignment in the South West Region. Bill Hohe, Manager of the Contracts Division Surveillance Branch, ASU 320, will be the Contracting Officer until a new CO is assigned.

SECONDARY RADAR PROGRAM (Cont'd)

The goal of the Program Office remains clear, to provide a service to the public by successfully acquiring, testing, and promoting the implementation of the Mode-S surveillance and communication system. Within cost, technical, and schedule constraints, the FAA will deploy a quality, supportable, enhanced, and expandable system to allow increased airspace capacity and efficiency with improved safety to all users.

IBI/MODE-S SITE DELIVERY SCHEDULE (Including ASR-9 Dates)

Del Seq. No.	Site Name	State	Region	Delivery Date
1	FAATC	NJ	ACYT	07/15/91
2	FAATC	NJ	ACYT	02/28/92
3	Orlando	FL	ASO	03/31/91
4	JV/FAA Depot	OK	DEP	04/30/92
5	Baltimore	MD	AEA	06/30/92
6	Denver	CO	ANM	06/30/92
7	Dallas	TX	ASW	08/31/95
8	Aeronautical Center	OK	OEX	07/31/92
9	Austin/Brgstrm	TX	ASW	07/31/92
10	Harrisburg	PA	AEA	10/31/92
11	FAATC	NJ	ACYT	08/31/92
12	Salt Lake City-9	UT	ANM	08/31/92
13	Kansas City	MO	ACE	08/31/92
14	Cleveland	OH	AGL	09/30/92
15	Saint Louis	MO	ACE	09/30/92
16	San Diego/MIR	CA	AWP	06/30/92
17	Charlotte	NC	ASO	11/30/92
18	Covington/Cincinnati	KY	ASO	10/31/92
19	Long Beach	CA	AWP	10/31/92
20	Jacksonville	FL	ASO	11/30/92

SECONDARY RADAR PROGRAM (Cont'd)

The goal of the Program Office remains clear, to provide a service to the public by successfully acquiring, testing, and promoting the implementation of the Mode-S surveillance and communication system. Within cost, technical, and schedule constraints, the FAA will deploy a quality, supportable, enhanced, and expandable system to allow increased airspace capacity and efficiency with improved safety to all users.

IBI/MODE-S SITE DELIVERY SCHEDULE (Including ASR-9 Dates)

Del Seq. No.	Site Name	State	Region	Delivery Date
1	FAATC	NJ	ACYT	07/15/91
2	FAATC	NJ	ACYT	02/28/92
3	Orlando	FL	ASO	03/31/91
4	JV/FAA Depot	OK	DEP	04/30/92
5	Baltimore	MD	AEA	06/30/92
6	Denver	CO	ANM	06/30/92
7	Dallas	TX	ASW	08/31/95
8	Aeronautical Center	OK	OEX	07/31/92
9	Austin/Brgstrm	TX	ASW	07/31/92
10	Harrisburg	PA	AEA	10/31/92
11	FAATC	NJ	ACYT	08/31/92
12	Salt Lake City-9	UT	ANM	08/31/92
13	Kansas City	MO	ACE	08/31/92
14	Cleveland	OH	AGL	09/30/92
15	Saint Louis	MO	ACE	09/30/92
16	San Diego/MIR	CA	AWP	06/30/92
17	Charlotte	NC	ASO	11/30/92
18	Covington/Cincinnati	KY	ASO	10/31/92
19	Long Beach	CA	AWP	10/31/92
20	Jacksonville	FL	ASO	11/30/92

SECONDARY RADAR PROGRAM (Cont'd)

IBI/MODE-S SITE DELIVERY SCHEDULE (Including ASR-9 Dates) (Cont'd)

Del Seq. No.	Site Name	State	Region	Delivery Date
45	Detroit	MI	AGL	07/31/93
46	Buffalo	NY	AEA	04/30/93
47	Milwaukee	WI	AGL	08/31/95
48	El Paso/Biggs	TX	ASW	03/31/94
49	San Antonio	TX	ASW	09/30/92
50	Minneapolis	MN	AGL	09/30/93
51	Newark	NJ	AEA	09/30/93
52	Houston/Hobby	TX	HOU	11/13/90
53	Raleigh/Durham	NC	ASO	10/31/93
54	Chicago	IL	AGL	10/31/93
55	Houston	TX	ASW	10/31/93
56	Fort Lauderdale	FL	ASO	07/31/92
57	Grand Rapids	MI	AGL	11/30/93
58	New Orleans	LA	ASW	11/30/93
59	Columbus	OH	AGL	12/31/93
60	Charleston	SC	ASO	12/31/93
61	Boston	MA	ANE	01/31/94
62	Los Angeles-1	CA	AWP	01/31/94
63	Bossier City/Shrevpt	LA	ASW	01/31/94
64	Sarasota/Bradenton	FL	ASO	01/31/94
65	Philadelphia	PA	AEA	02/28/94
66	Atlanta	GA	ASO	02/28/94
67	Ontario	CA	AWP	02/28/94
68	Colleyville	TX	ASW	02/29/94

SECONDARY RADAR PROGRAM (Cont'd)

IBI/MODE-S SITE DELIVERY SCHEDULE (Including ASR-9 Dates) (Cont'd)

Del Seq. No.	Site Name	State	Region	Delivery Date
69	Oklahoma City	OK	ASW	07/31/93
70	Los Angeles-2	CA	AWP	03/31/94
71	Birmingham	AL	ASO	03/31/94
72	Washington	DC	AEA	04/30/94
73	Wichita/McCnll	KS	ACE	04/30/94
74	Santa ANA/EL Toro	CA	AWP	04/30/94
75	Camp Springs/Andrews	MD	AEA	05/31/94
76	Cecil Field	GA	ASO	05/31/95
77	Battle Mountain	NV	AWP	06/30/94
78	Tulsa	OK	ASW	02/2893
79	Pittsburgh	PA	AEA	02/28/93
80	Tallahassee	FL	ASO	06/30/95
81	Omaha	NE	ACE	05/31/94
82	White Plains	NY	AEA	03/31/93
83	Salt Lake City/Fran PK-1	UT	ANM	06/30/94
84	Pensacola	FL	ASO	07/31/95
85	Rock Springs	WY	ANM	05/31/94
86	Des Moines	IA	ACE	07/31/94
87	Syracuse	NY	AEA	07/31/94
88	Jackson	MS	ASO	08/31/95
89	Grand Junction	CO	ANM	07/31/94
90	Cedar Rapids	IA	ACE	08/31/94
91	Bangor	ME	ANE	08/31/94
92	Fort Smith	AR	ASW	09/30/94

SECONDARY RADAR PROGRAM (Cont'd)

IBI/MODE-S SITE DELIVERY SCHEDULE (Including ASR-9 Dates) (Cont'd)

Del Seq. No.	Site Name	State	Region	Delivery Date
93	Chicago South (TNLYPK)	IL	AGL	09/30/94
94	Sain Albans	VT	ANE	09/30/94
95	Little Rock	AR	ASW	10/31/94
96	Angel Peak	NV	AWP	08/31/95
97	Green Bay	WI	AGL	10/31/94
98	Roanoke	VA	AEA	10/31/94
99	Lake Charles	LA	ASW	11/30/94
100	Tonopah	NV	AWP	07/31/95
101	Klamath Falls/Keno	OR	ANM	06/30/94
102	Duluth	MN	AGL	11/30/94
103	Hampton/LGLY AFB	TX	ASW	11/30/94
104	Corpus Christi	TX	ASW	12/31/94
105	Abilene/Dyess	TX	ASW	01/31/95
106	Red Bluff	CA	AWP	02/28/95
107	Oakland	CA	AWP	07/31/94
108	Bristol/Johnson/Kingsport	TN	ASO	01/31/95
109	Springfield	MO	ACE	02/29/95
110	Midland	TX	ASW	02/28/95
111	Santa Barbara	CA	AWP	01/31/95
112	Garden City	KS	ACE	01/31/95
113	Wilmington	NC	ASO	02/28/95
114	Mesa Rica	NM	ASW	03/31/95
115	Gallup	NM	ASW	04/30/94
116	Evansville	IN	AGL	03/31/95

SECONDARY RADAR PROGRAM (Cont'd)

IBI/MODE-S SITE DELIVERY SCHEDULE (Including ASR-9 Dates) (Cont'd)

Del Seq. No.	Site Name	State	Region	Delivery Date
117	Amarillo	TX	ASW	03/31/95
118	Trinidad	CO	ANM	05/31/95
119	Parker	IN	ANM	04/04/95
120	Warner Robbins/Macon	NV	ASO	04/30/95
121	Tyler/CHNDLR	NM	AGL	04/30/95
122	Cedar City	UT	ANM	06/30/95
123	Lusk	WY	ANM	08/31/94
124	Fallon	NV	AWP	03/31/95
125	Bismarck	MN	AGL	05/31/95
126	Marietta/Dobbins	GA	ASO	05/31/95
127	Spokane	WA	ANM	08/31/94
128	Fargo	TX	AGL	04/30/95
129	Lovell	WY	ANM	06/30/95
130	Rockville	NE	ACE	06/30/95
131	Billings	MT	ANM	10/31/94
132	Fresno	CA	AWP	11/30/94
133	Gettsburg	SD	AGL	07/31/95
134	Ashton	ID	ANM	07/31/95
135	BOI-Cascade	ID	ANM	08/31/95
136	Great Falls	MT	ANM	09/30/94
137	North Platte	NE	ACE	08/31/95
138	Sacramento	CA	AWP	08/30/95

SECONDARY RADAR PROGRAM (Cont'd)

PRECISION RUNWAY MONITOR (PRM) PROGRAM

The Precision Runway Motor (PRM) program is in high gear with significant efforts underway to enter the program into the National Airspace System (NAS). The most critical of these include: completing the upgrade of the E-Scan system for Raleigh Durham Airport (RDU), planning the procurement of PRM systems to meet FAA requirements, and continuing with simulations to further evaluate PRM system applications.

Based on Congressional direction, the FAA has awarded a sole source contract to Allied Signal Aerospace/Bendix Communications for the production and turnkey installation of five and one to three optional PRM E-Scan Secondary Surveillance Radars, on a firm-fixed-price basis. The five sites have been selected: Raleigh, Memphis, Minneapolis, Baltimore, and Atlanta.

The PRM Matrix Management Team completed the first phase of Teambuilding on October 7 and 8. At this time, they solidified their program mission and begin to develop their individual Program Directives (PD). Meanwhile, the PRM Office approved the Mission Need Statement (MNS), as well as the development and coordination of the Program Master Plan (PMP) and the Acquisition Plan (AP). The Matrix Team continues to meet clarifying technical and program issues. A few notes to make; Carol Driscoll, ASU-423, has been appointed Associate Program Manager for Quality (APMQ). Bob Berlucchi, ATM-120, is the new Associate Program Manager for Civil Operations (APMCO), and Cindy Schalaund, ANS-420, is APM for Logistics (APML) for the PRM Matrix Team.

With the award of the contract on March 27, 1992 approaching, the Program Office for PRM continues to follow the PRM Matrix Team Mission, which is to provide users with the capability to conduct simultaneous, independent approaches to parallel runways (including triples and quads) during instrument meteorological conditions (IMC). The system will reduce weather related delays, increase capacity while maintaining and/or enhancing aviation safety. This will include acquisition of fully tested supportable system implemented in the NAS within program constraints.

PRECISION RUNWAY MONITOR (PRM) E-SCAN
Secondary Surveillance Radars

Del Seq. No.	Site Name	State	Region	Delivery Date
1	Minneapolis/St. Paul	MN	AGL	03/94
2	Memphis	TN	ASO	07/94
3	Atlanta	GA	ASO	11/94
4	Raleigh/Durham	NC	ASO	03/95
5	Baltimore	MD	AEA	07/95

SECONDARY RADAR PROGRAM (Cont'd)

PRECISION RUNWAY MONITOR (PRM) PROGRAM

The Precision Runway Motor (PRM) program is in high gear with significant efforts underway to enter the program into the National Airspace System (NAS). The most critical of these include: completing the upgrade of the E-Scan system for Raleigh Durham Airport (RDU), planning the procurement of PRM systems to meet FAA requirements, and continuing with simulations to further evaluate PRM system applications.

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5	Baltimore	MD	AEA	07/95

SECONDARY RADAR PROGRAM (Cont'd)

PROGRAM IMPLEMENTATION PLAN (PIP) (Cont'd)

4. Within 10 days after the ORD of the Mode-S System, the donor site would certify, in writing, the modifications and operational status of the ATCBI-5 system through the regional office to the Program Manager for Secondary Radar, ANR-300. This office would fund, through a national work release to TSSC, for removing, packing, shipping, installing, bringing the system to initial tolerances, testing the relocated ATCBI-5 system, and the disposing of the displaced ATCBI-3 per FAA instructions at that time.

To facilitate field support and expedite the development of the Leapfrog PIP, your consideration and preference of the above listed alternatives or your recommendation for a more time/cost efficient approach would be appreciated by COB March 13, 1992.

For further information, please contact Mr. Jim Moe, Mode-S Branch, ANR-110, at FTS 266-8525.

EN ROUTE RADAR PROGRAM

PROGRAM OFFICE PERSONNEL

Program Manager:	Richard Lay	ANR-100	(202) 606-4661
Deputy Program Manager:	Bill Byptak (USAF)	ANR-401	(202) 606-4659
Business Manager:	Olivia Stevenson	ANR-402	(202) 606-4656
APM for Engineering:	Dennis Kolb	ANR-140	(202) 606-4649
Technical Officer:	Karl Roulston	ANR-140	(202) 606-4655
Program Office Fax:	FTS 8-266-4696 or (202) 606-4696		

ARSR-4 PROGRAM

PHASE I OF MOUNT LAGUNA SITE PREP COMPLETED

Phase I of the ARSR-4 installation at Mount Laguna CA was completed on February 6. The 25-foot ARSR-4 tower has been erected and the covered walkway between the ARSR-4 building and the tower perimeter is in place.

SECONDARY RADAR PROGRAM (Cont'd)

PROGRAM IMPLEMENTATION PLAN (PIP) (Cont'd)

4. Within 10 days after the ORD of the Mode-S System, the donor site would certify, in writing, the modifications and operational status of the ATCBI-5 system through the regional office to the Program Manager for Secondary Radar, ANR-300. This office would fund, through a national work release to TSSC, for removing, packing, shipping, installing, bringing the system to initial tolerances, testing the relocated ATCBI-5 system, and the disposing of the displaced ATCBI-3 per FAA instructions at that time.

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EN ROUTE RADAR PROGRAM

PROGRAM OFFICE PERSONNEL

Program Manager:	Richard Lay	ANR-100	(202) 606-4661
Deputy Program Manager:	Bill Byptak (USAF)	ANR-401	(202) 606-4659
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ARSR-4 PROGRAM

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EN ROUTE RADAR PROGRAM (Cont'd)

ARSR-3 RMM INSTALLATION SCHEDULE
(As Of 02/13/92)

Site	Ident	Region	Type	Start	Finish	Status
Joliet, Il	XXX	AGL	FAA	05/07/90	05/22/90	Completed
Kenai, AK	ENA	AAL	FAA	11/27/90	12/18/90	Completed
Sonora, TX	SOA	ASW	FAA	02/18/91	03/08/91	Completed
Mt. Laguna, CA	QRW	AWP	JSS	04/01/91	06/19/91	Completed
Lakeside, MT	QLS	ANM	JSS	07/10/91	07/27/91	Completed
Fossil, OR	QVN	ANM	FAA	09/04/91	09/25/91	Completed
Bedford, VA	QBE	AEA	FAA	10/21/91	11/08/91	Completed
Lincolnton, GA	QNK	ASP	FAA	12/02/91	12/23/91	Completed
Newport, MS	QNM	ASO	FAA	01/20/92	02/07/92	Completed
Binns Hall, VA	QBN	AEA	FAA	03/02/92	03/20/92	
Arlington, IA	QJO	ACE	FAA	04/13/92	05/01/92	
Clearfield, PA	CLF	AEA	FAA	05/18/92	06/05/92	Rescheduled
Empire, MI	QJA	ANM	JSS	06/29/92	07/17/92	*
Riverhead, NY	QVH	AEA	JSS	08/10/92	08/28/92	*
Finley, ND	QFI	AGL	JSS	09/21/92	10/09/92	*
The Plains, VA	QPL	AEA	FAA	11/02/92	11/20/92	
Seligman, AZ	QPL	AEA	FAA	01/04/93	01/22/93	
Cross City, FL	CTY	ASO	JSS	02/15/93	03/05/93	*
Ft. Lonesome, FL	QJT	ASO	JSS	03/29/93	04/16/93	*
Mt. Kaala, HI	QKA	AWP	JSS	06/14/93	09/24/93	*
Nashwauk, MN	QVD	AGL	JSS	09/06/93	09/24/93	*
Kirksville, MO	IRK	ACE	FAA	10/18/93	11/05/93	

* These sites will have to be rescheduled as the U.S. Air Force has not completed their final evaluation of this modification.

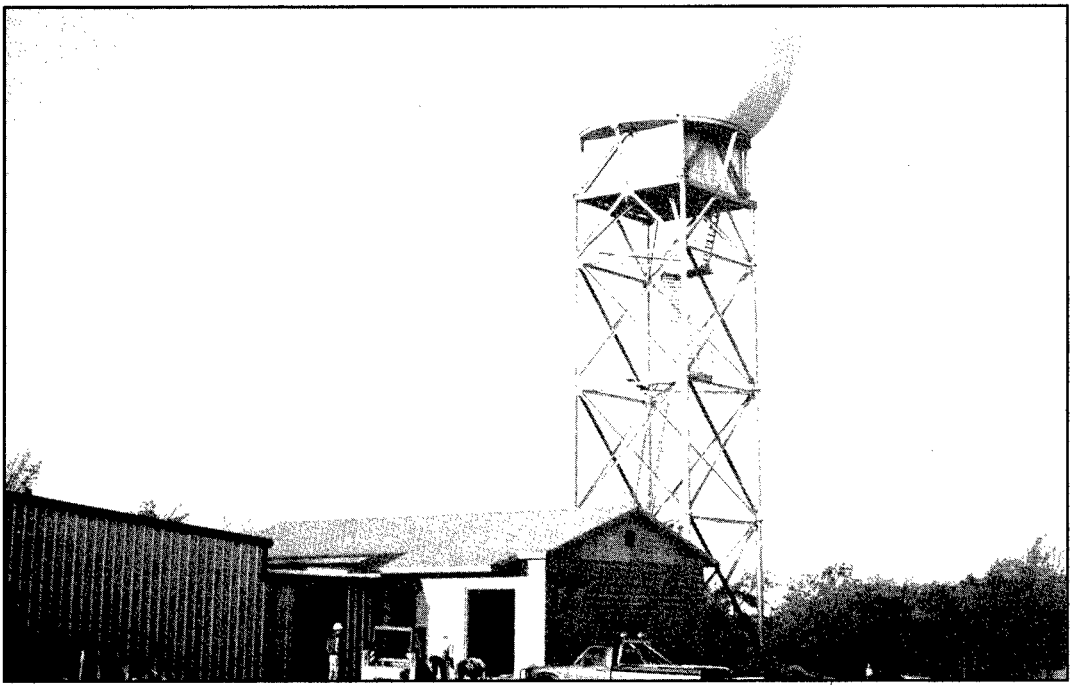
WEATHER RADAR PROGRAM

PROGRAM OFFICE PERSONNEL

Program Manager:	Don Turnbull	ANR-500	(202) 606-4693
Business Manager:	Joyce Eaton	ANR-502	(202) 606-4692
APM for Engineering:	Ray Weimer	ANR-150	(202) 606-4683
Technical Officer:	John Lupnacca	MMC	(202) 606-5677
Program Office Fax:	FTS 8-266-4191 or (202) 606-4191		

TERMINAL DOPPLER WEATHER RADAR (TDWR) PROGRAM

The initial TDWR system has been installed at the FAA Aeronautical Center. After completion of testing, this system will be used by the FAA Academy for TDWR training. (FAAC)



Site of TDWR Training Facility

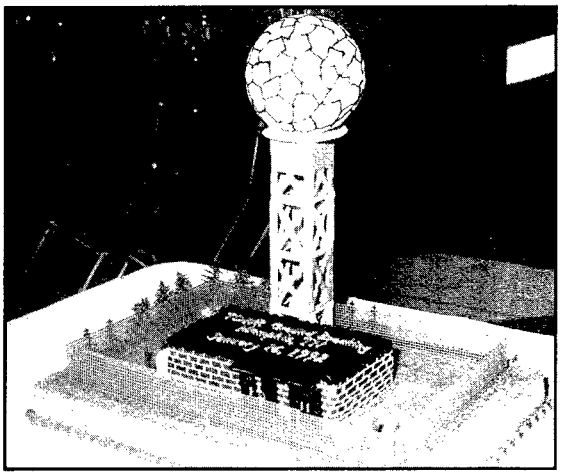
In addition, an integral part of the TDWR program is the establishment of a Program Support Facility (PSF) at the FAAC. Operated by ASM-600, the PSF will be responsible for configuration management, software maintenance, technical manual maintenance, software and hardware upgrades, and resolution of field problems. A complete TDWR system will be installed at the PSF.

WEATHER RADAR PROGRAM (Cont'd)

GROUNDBREAKING CEREMONIES

On January 16, the formal groundbreaking ceremony for the first operational TDWR was held in Memphis at the Memphis International Airport. Speakers included Dr. W. Herenton, the Mayor of Memphis, and Garland Castleberry, ASO-1. The keynote address was given by John Turner, AND-1. The highlight of the ceremony was cutting the cake shaped like a TDWR.

John Turner, AND-1



TDWR Cake

An informal groundbreaking ceremony was also held at the actual TDWR site in Nesbit, Mississippi. Groundbreakers included Ray Weimer, Associate Program Manager for Engineering; Don Turnbull, Program Manager for Weather Radar; and Joyce Eaton, Business Manager for Weather Radar. Construction has begun at this site with equipment delivery scheduled for June.

Groundbreakers: Ray Weimer, Don Turnbull, and Joyce Eaton

WEATHER RADAR PROGRAM (Cont'd)

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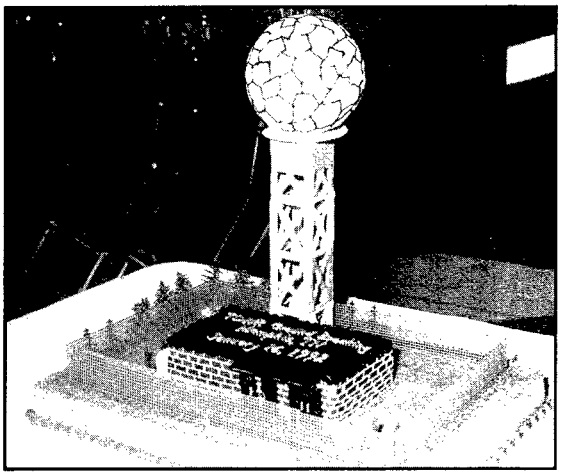

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Groundbreakers: Ray Weimer, Don Turnbull, and Joyce Eaton

WEATHER RADAR PROGRAM (Cont'd)

The delivery schedule for the FAA's non-CONUS NEXRADs is shown below:

Region	Location	Delivery
ASO	San Juan, Puerto Rico	6/94
ASO	Georgetown, Bahamas	3/95
AWP	Kamuela, HI	3/95
ASO	Grand Turk, BWI	4/95
AWP	Molokai, HI	4/95
AWP	South Kauai, HI	5/95
AAL	Anchorage, AK	6/95
AAL	Middleton Island, AK	7/95
AAL	Sitka, AK	8/95
AAL	Fairbanks, AK	9/95
AAL	King Salmon, AK	4/96
AAL	Nome, AK	5/96
AAL	Bethel, AK	5/96

For your information, the NEXRAD contractor, UNISYS, has changed its corporate name to PARAMAX.

EN ROUTE/SPECIAL PROJECTS

PROGRAM OFFICE PERSONNEL

APM for Engineering:	Donald E. Johnson	ANR-100	(202) 606-4574
Technical Officers:	Mike Huffman - FGAR (Radomes)	ANR-110	(202) 606-4585
	Ted Weyrauch - CD-2	ANR-110	(202) 606-4789
	Mike Polchert - SSR/DMTI & LLRTU	ANR-110	(202) 606-4599
	Jim Duffer - SSRBD	ANR-110	(202) 606-4580
	Ted Boatright - ARSR-3 3LW	ANR-110	(202) 606-4604
Program Office Fax:	FTS 8-266-4383 or (202) 606-4483		

EN ROUTE/SPECIAL PROJECTS (Cont'd)

FIXED GROUND ANTENNA RADOME

New and larger Radomes are being provided for the L-Band Long Range Radar (LLRs) that will receive collocated Mode-S installations. In addition, radomes will be provided for the Beacon-Only Sites that will be equipped with the Mode-S. A total of six different types of radomes will be procured to accommodate two different wind load conditions and three sizes. The project includes the procurement, testing, installation, and support of up to 110 systems.

A complete Request for Proposal (RFP) package has been developed, and a Procurement Readiness Review (PRR) has been completed. The RFP is expected to be issued in March 1992.

SOLID STATE RECEIVER/ DIGITAL MOVING TARGET INDICATOR (SSR/DMTI)

This modification upgrades existing ARSR-1/2 and FPS series vacuum-tube long-range radars with a solid state receiver and digital MTI at 76 sites.

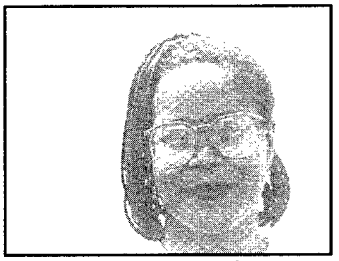
The contractor, Norden Systems, Inc. of Norwalk, Connecticut, has delivered all of the 76 systems and completed 69 installations. The remaining seven systems will be installed by the end of May, 1992.

Some improvements have been made in the upgrade since its inception. The contractor has begun a retrofit at all of the sites to install the current revisions. More than half of the sites have had the retrofit installed. This work is to be completed by May of 1992. In addition, the contractor has made several improvements to the existing alignment procedures. Changes will be distributed to the sites in the form of change pages in early Summer, 1992.

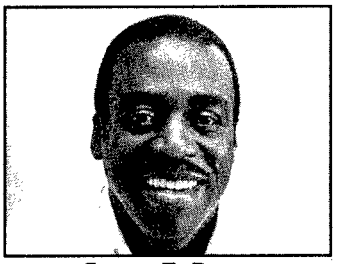
SOLID STATE TRANSMITTER UPGRADE

A companion procurement to provide new transmitters for the 76 sites that have received the SSR/DMTI is being developed. A Cost Benefit Analysis has been completed. Several other documents, including the Mission Needs Statement, Statement of Work (SOW), and Specification are being developed. The project will be a Major System Acquisition (MSA). Contract award is expected in 1994 with installations beginning in 1997 and continuing through 1999.

ANR SECRETARIES



Patricia L. Finley
Secretary, ANR-1



George E. Brown
Secretary, ANR-100

Eileen Hohman
Terminal Radar, ANR-200

Carolyn Berry
Secretary, ANR-300

Shamar Middleton
En Route/Spec. Projects
ANR-110

Karen Williams
Terminal Radar, ANR-120

Lois Mosby
MODE-S, ANR-130

Angela Brinson
ARSR-4, ANR-140

Tracy Jeffries
Weather Radar, ANR-150

ANR SURVEILLANCE AND ENGINEERING

PROGRAM DIRECTOR FOR SURVEILLANCE, ANR-1 (**) X4273		
WEIGEL, Carey, Dir. (224)	U812	606-4531
FINLEY, Patricia* (222)	U812	606-4531
KENNEDY, Janice (221)	U812	606-4537
SURVEILLANCE ENGINEERING DIVISION, ANR-100 (**) X4273		
PRIMEGGIA, Carmine, Mgr. (225)	U812	606-4532
BROWN, George E.* (223)	U812	606-4532
COLLINS, William G. (226)	U812	606-4532
RYAN, Milt	U812	606-4536
EN ROUTE/SPEC. PROJECTS BRANCH, ANR-110 - (**) X4383		
JOHNSON, Donald E., Mgr. (236)	U818	606-4574
MIDDLETON, Shamar* (234)	U818	606-4574
BENSON, Robert	U819	606-4602
BOATRIGHT, Teddy	U819	606-4604
DUFFER, James D.	U821	606-4580
HODSON, Philip	U819	606-4579
HOLLAND, Billy	U810	606-4581
HUFFMAN, Michael	U819	606-4585
POLCHERT, Michael J.	U819	606-4599
WEYRAUCH, Theodore H.	U819	606-4789
BRANCH, Lawrence#	U828A	606-4737
DRUMMOND, Rodney#	U819	606-4698
HABIB, Hossein#	U818	606-4573
NAJMY, Frederick#	U818	606-4187
ZAEMES, Ted#	U819	606-4592
TERMINAL RADAR, ANR-120 - (**) X4625		
MORROCKS, John, Mgr.	U810	606-4559
GARKA, Anthony A.	U810	606-4610
GOODCHILD, William	U810	606-4607
HAYNES, Patricia	U810	606-4614
KAYS, Thomas	U810	606-4564
KENT, Harry S.	U810	606-4635
LEE, Fong	U810	606-4620
LEMAN, Phillip C.	U810	606-4623
OLIVER, Kathy	U810	606-4563
PLUNKETT, Michael	U810	606-4565
REYTAR, William	U810	606-4624
SUTLER, Wayne	U803	606-4630
BALL, Sarah#	U810	606-4611
BOLTE, Sarah#	U810	606-4611
GILLESPIE, Edward#	U810	606-4616
JUNGHANS, Kay#	U810	606-4609
MAILLET, Armand#	U810	606-4616
WILLIAMS, Karen# (245)	U810	606-4559
MODE S BRANCH, ANR-130 - (**) X4286		
JOHNSON, Byron, Mgr.	U803	606-4644
MOSBY, Lois* (227)	U803	606-4627
ASIN, Joseph S.	U810	606-4638
KARLIN, Sylvan I.	U805	606-4632
MOE, James P.	U810	606-4637
SLOANE, Charles W.	U810	606-4631
TAUBENKIBEL, Lawrence	U805	606-4639
ZWINKLIS, Kimberly	U803	606-4645
HEROLD, Joseph#	U810	606-4634
KLEINHAN, John#	U803	606-4799
REED, Keysha#	U810	606-4633
RIDGEWAY, Robert#	U805	606-4270
ARSR-4 BRANCH, ANR-140 - (**) X4696		
KOLB, Dennis, Mgr. (240)	U826	606-4649
BRIMSON, Angela* (237)	U826	606-4648
BUI, Donald	U801	606-4638
HUNTER, Shirley	FOB 10A	267-5639
KINNEY, Donald (USAF)	U801	606-4738
LATHAM, Vanessa (USAF)	U801	606-4743
LOWE, William B.	U801	606-4577
ROULSTON, Karl	U801	606-4655
BONOMO, Anthony#	U829	606-4748
BULLINGTON, Jay#	U826	606-4671
DeCHRISTOPHER, Joe#	U826	606-4192
DRUMMOND, Rodney#	U801	606-4577
EDGECOMBE, Tracy#	U829	606-4749

ARSR-4 BRANCH, ANR-140 (Cont'd)		
EGGLESTON, William#	U801	606-4739
FESSLER, John#	U829	606-4670
HOSETZ, Therron#	U826	606-4694
HOUSTON, Susan#	U801	606-4747
KESSLER, Bob#	U826	606-4654
KINSEY, George#	U826	606-4696
LONG Paul#	U826	606-4694
MASON, Roderick#	U826	606-4797
MIRZAI, Helen#	U829	606-4785
MORRISON, George#	U826	606-4695
TAYLOR, William#	U828A	606-4699
TRINH, Quan#	U829	606-4781
WUNDERLICH, Robert#	U826	606-4697
WEATHER RADAR BRANCH, ANR-150 - (**) X4191		
WEIMER, Ray, Mgr. (232)	U821	606-4683
JEFFRIES, Tracy* (230)	U821	606-4683
JACOBSON, Robert L.	JSPO	301-713-0815
JENKINS, Thomas E.	U824	606-4688
LEVY, Arthur L.	U824	606-4689
RICHMAN, Gayleen	U824	606-4686
RODRIGUEZ, Carlos	U824	606-4783
SAUNDERS, Donald	U822	606-4690
COLLINS, William#	U824	606-4783
DREHER, Stephen#	U821	606-4684
PROGRAM MANAGER FOR TERMINAL RADAR, ANR-200 (**) X4610		
TAYLOR, Gerald, Mgr. (246)	U810	606-4622
HOHMAN, Eileen* (244)	U810	606-4622
LOYNES, John	U810	606-4621
PROGRAM MGR. FOR SECONDARY RADAR, ANR-300 (**) X4983		
REYNOLDS, Pike, Mgr. (229)	FOB-10A	267-8258
BERRY, Carolyn* (228)	U803	606-4628
LANGWEIL, Irene	U803	606-4798
PROGRAM MANAGER FOR EN ROUTE RADAR, ANR-400 (**) X4694		
LAY, Richard, Mgr. (238)	U826	606-4661
STEVENSON, Olivia	U826	606-4656
SYPTAK, William (USAF)	U826	606-4659
BURKE, Phillip#	U826	606-4569
LANDGROVER, Peggy	U826	606-4648
PROGRAM MGR. FOR WEATHER RADAR, ANR-500 - (**) X4191		
TURNBULL, Donald, Mgr. (233)	U821	606-4693
EATON, Joyce	U822	606-4692
PROGRAM MANAGER, FOR NEXRAD, ANR-600		
BROWN, Robert F. (JSPO)	U812	301-713-0144
CONTRACTS DIV., SURVEILLANCE BR., ASU-320 - (**) X4269		
HOHE, William, Mgr. (243)	U814	606-4220
FERGUSON, Willie* (241)	U814	606-4220
SPRINGER, Tamarah (242)	U814	606-4221
LeBLANC, Harold	U814	606-4525
TERHUNE, Linda#	U814	606-4676
SUTTON, Lisa#	U814	606-4678
TELFER, Dan	U814	606-4515
CONN, Micheline, Section Supv.	U814	606-4504
BOYER, Gerald	U814	606-4527
McLAURIN, Sara	U814	606-4523
MOSKO, William	U814	606-4522
SERRATO, Joanne	U814	606-4750
GREENFELDER, Nancy, Section Supv.	U814	606-4503
RELYEA, Bruce	U814	606-4526
HUFFORD, Barbara	U814	606-4528
McCABE, Jody	U814	606-4529
NUSRATY, Caroline	U814	606-4530
CONFERENCE ROOM ASU-320	U814	606-4745
CONFERENCE ROOM ANR-1	U812	606-4542

* = Secretary ** = Fax Number # = Contractor
Uxxx = Universal Building room xxx
(xxx) = Intercom number
FTS Number 266-(XXXX) and the last four digits

ANR Conference Rooms Scheduling - George	606-4532
ALG Conference Room Scheduling - Willie	606-4220
GUARD'S DESK	606-4555

ANR SURVEILLANCE AND ENGINEERING

NAME	SECTION	ROOM	PHONE
ASIN, Joseph S.	ANR-130	U810	606-4638
BALL, Sarah#	ANR-120	U810	606-4611
BELYEA, Bruce	ASU-320	U814	606-4526
BENSON, Robert	ANR-110	U819	606-4602
BERRY, Carolyn* (228)	ANR-300	U803	606-4628
BOATRIGHT, Teddy	ANR-110	U819	606-4604
BOBBY, Steven	ASU-320	U814	606-4678
BOLTE, Sarah#	ANR-120	U810	606-4611
BONOMO, Anthony#	ANR-140	U829	606-4748
BOYER, Gerald	ASU-320	U814	606-4527
BRANCH, Lawrence#	ANR-110	U828A	606-4737
BRINSON, Angela* (237)	ANR-140	U826	606-4648
BROWN, George E.* (223)	ANR-100	U812	606-4532
BROWN, Robert F.	ANR-600	U000	301-713-0144
BUI, Donald	ANR-140	U801	606-4658
BULLINGTON, Jay#	ANR-140	U826	606-4671
BURKE, Phillip#	ANR-140	U826	606-4569
COLLINS, William#	ANR-150	U824	606-4783
COLLINS, William (226)	ANR-100	U812	606-4541
CONN, Micheline	ASU-320	U814	606-4504
DEADWYLER, Mary	ASU-320	U814	606-4678
DeCHRISTOPHER, Joseph#	ANR-140	U826	606-4192
DENDY, Frederick	ASU-320	U814	606-4524
DREHER, Stephen (231)#	ANR-150	U821	606-4684
DRUMMOND, Rodney#	ANR-140	U801	606-4698
DUFFER, James D.	ANR-110	U821	606-4580
EATON, Joyce	ANR-500	U822	606-4692
EDGECOMBE, Tracy#	ANR-140	U829	606-4749
EGGLESTON, William#	ANR-140	U801	606-4739
FERGUSON, Willie* (241)	ASU-320	U814	606-4220
FESSLER, John#	ANR-140	U829	606-4670
FINLEY, Patricia* (222)	ANR-1	U812	606-4531
GARKA, Anthony A.	ANR-120	U810	606-4610
GILLESPIE, Edward#	ANR-120	U810	606-4616
GOODCHILD, William	ANR-120	U810	606-4607
GREENFELDER, Nancy	ASU-320	U814	606-4503
HABIB, Hossein#	ANR-110	U818	606-4573
HAYNES, Patricia	ANR-120	U810	606-4614
HEROLD, Joseph#	ANR-130	U810	606-4634
HODSON, Philip	ANR-110	U819	606-4579
HOHE, William (243)	ASU-320	U814	606-4220
HOHMAN, Eileen* (244)	ANR-120	U810	606-4622
HOLLAND, Billy	ANR-110	U818	606-4581
HORROCKS, John	ANR-120	U810	606-4559
HOSETZ, Therron#	ANR-140	U826	606-4694
HOUSTON, Susan#	ANR-140	U801	606-4747
HUFFMAN, Michael	ANR-110	U819	606-4585
HUFFORD, Barbara	ASU-320	U814	606-4528
HUNTER, Shirley	ANR-140	U810	267-5639
JACOBSON, Robert L.	ANR-150	JSPO	301-713-0815
JEFFRIES, Tracy* (230)	ANR-150	U821	606-4683
JENKINS, Thomas E.	ANR-150	U824	606-4688
JOHNSON, Byron	ANR-130	U803	606-4644
JOHNSON, Donald E. (236)	ANR-110	U818	606-4574
JUNGHANS, Kay#	ANR-120	U810	606-4609
KARLIN, Sylvan I.	ANR-130	U805	606-4632
KAYS, Thomas	ANR-120	U810	606-4564
KENNEDY, Janice (221)	ANR-1	U812	606-4537
KENT, Harry S.	ANR-120	U810	606-4635
KESSLER, Robert#	ANR-140	U826	606-4654
KINNEY, Donald (USAF)	ANR-140	U801	606-4738
KINSEY, George#	ANR-140	U826	606-4696
KLEINHAN, John#	ANR-130	U803	606-4799
KOLB, Dennis (240)	ANR-140	U826	606-4649
LANDGROVER, Peggy	ANR-140	U826	606-4648
LANGWEIL, Irene	ANR-300	U803	606-4798
LATHAM, Vanessa (USAF)	ANR-400	U801	606-4743
LAY, Richard (238)	ANR-400	U826	606-4648
LeBLANC, Harold	ASU-320	U814	606-4525
LEE, Fong	ANR-120	U810	606-4620
LEMAN, Phillip C.	ANR-120	U810	606-4623
LEVY, Arthur L.	ANR-150	U824	606-4689
LONG Paul#	ANR-140	U826	606-4694
LOWE, William B.	ANR-140	U801	606-4577
LOYNES, John	ANR-200	U810	606-4621
MAILLET, Armand#	ANR-120	U810	606-4616
MASON, Roderick#	ANR-140	U826	606-4797
McCABE, Jody	ASU-320	U814	606-4529
McLAURIN, Sara	ASU-320	U814	606-4523
MIDDLETON, Shamar* (234)	ANR-110	U818	606-4574
MIRZAI, Helen#	ANR-140	U829	606-4785
MOE, James P.	ANR-130	U810	606-4637
MORRISON, George#	ANR-140	U826	606-4695
MOSBY, Lois* (227)	ANR-130	U803	606-4627
MOSKO, William	ASU-320	U814	606-4522
NAJMY, Frederick#	ANR-110	U818	606-4187
NELMS, Elliot#	ASU-320	U814	606-4676
NUSRATY, Caroline	ASU-320	U814	606-4530
OLIVER, Kathy	ANR-120	U810	606-4563
PLUNKETT, Michael	ANR-120	U810	606-4565
POLCHERT, Michael J.	ANR-110	U819	606-4599
PRIMEGGIA, Carmine (225)	ANR-100	U810	606-4532
REED, Keysha#	ANR-130	U810	606-4633
REYNOLDS, Pike (229)	ANR-300	U803	606-4628
REYTAR, William	ANR-120	U810	606-4624
RICHMAN, Gayleen	ANR-150	U824	606-4686
RIDGEWAY, Robert#	ANR-130	U805	606-4270
RODRIGUEZ, Carlos	ANR-150	U824	606-4783
ROULSTON, Karl	ANR-140	U801	606-4655
RYAN, Milton	ANR-100	U812	606-4536
SAUNDERS, Donald	ANR-150	U822	606-4690
SERRATO, Joanne	ASU-320	U814	606-4750
SLOANE, Charles W.	ANR-130	U810	606-4631
SPRINGER, Tamarah (242)	ASU-320	U814	606-4221
STEVENSON, Jesse O.	ANR-400	U826	606-4656
SUTLER, Wayne	ANR-120	U803	606-4630
SUTTON, Lisa#	ASU-320	U814	606-4678
SYPTAK, William (USAF)	ANR-400	U826	606-4659
TAUBENKIBEL, Lawrence	ANR-130	U805	606-4639
TAYLOR, Gerald (246)	ANR-200	U810	606-4685
TAYLOR, William#	ANR-140	U828A	606-4622
TELFER, Daniel	ASU-320	U814	606-4515
TRINH, Quan#	ANR-140	U829	606-4781
TURNBULL, Donald (233)	ANR-500	U821	606-4693
WEIGEL, Carey (224)	ANR-1	U812	606-4531
WEIMER, Ray (232)	ANR-150	U821	606-4683
WEYRAUCH, Theodore H.	ANR-110	U819	606-4789
WILLIAMS, Karen# (245)	ANR-120	U810	606-4559
WUNDERLICH, Robert#	ANR-140	U826	606-4697
ZAEMES, Theodore#	ANR-110	U819	606-4592
ZWINKLIS, Kimberly	ANR-130	U803	606-4645

* = Secretary ** = Fax Number # = Contractor
(xxx) = Intercom number
FTS Number 266-(XXXX) and the last four digits

GUARD'S DESK **606-4555**

FROM THE PROGRAM DIRECTOR

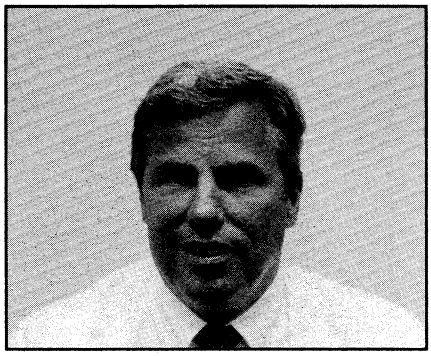
FROM THE DESK OF
Carey L. Weigel

Greetings...

As many of you already know, I have accepted an opportunity to serve as the Division Manager of AF Maintenance Operations. This change for me to the Systems Maintenance Service will help me gain a broader perspective of the FAA and will fulfill a personal desire to be part of the FAA operational world. I will strive to bring enthusiasm and excitement to the DASM ASM-200 mission and will carry with me techniques we have used effectively in ANR built around stakeholder participation, teamwork, and total quality concepts in the workplace. I'm looking forward to joining their management team.

Leaving this position is difficult - I am proud of the organization, the programs, and every person who works here. I think ANR people have made excellent progress in accomplishing what has been expected from us since "matrix" and ANR were introduced. I'm most satisfied that our projects are receiving strong support and teamwork, particularly in the regional offices, field sites, and field support organizations, where ultimate success or failure is on the line. I credit our Program Managers with cultivating that atmosphere, but realize it can only happen because of the dedication and commitment of individual engineers, technicians, business managers, analysts, contract specialists, logisticians, secretaries and a host of others, including of course many Air Traffic specialists. I have no doubt the progress of our work here will continue.

You should know that the professionalism, pride, and drive to continually serve our customers with the finest technology and quality products available is taken seriously on Connecticut Avenue. I have shared in that commitment with my colleagues and have enjoyed my partnership here immensely. I will miss my 118 friends here but leave confident they will serve you well. Our customers must demand it; we would have it no other way!!!



Carey L. Weigel
Program Director for Surveillance,
ANR-1